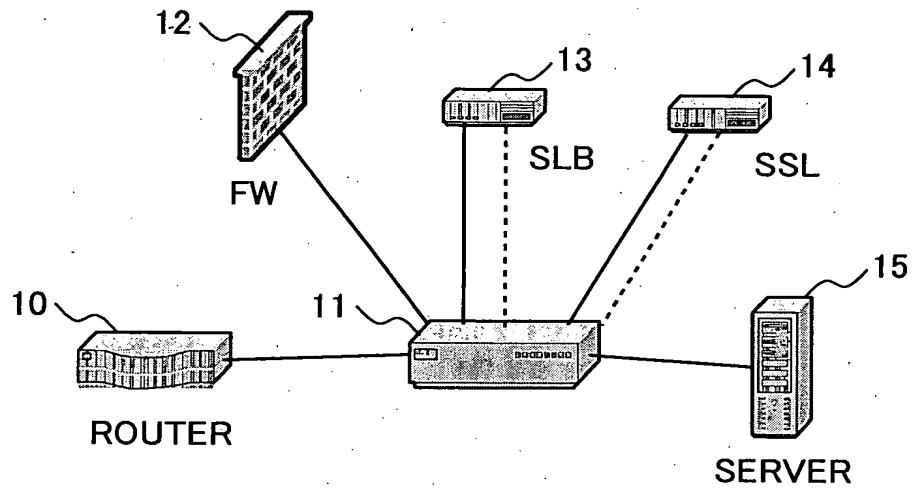


BEST AVAILABLE COPY

FIG.1



BEST AVAILABLE COPY

FIG.2

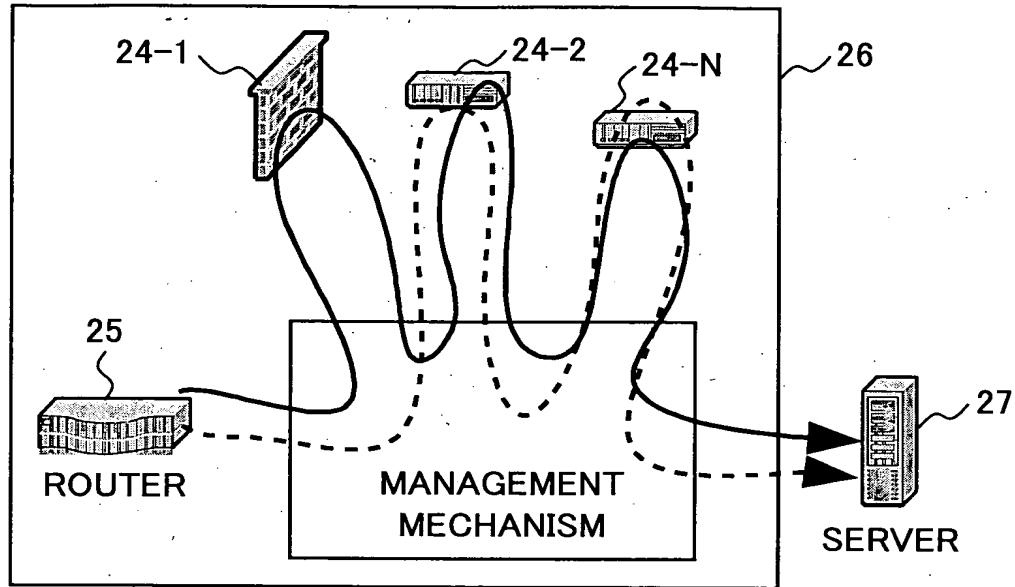
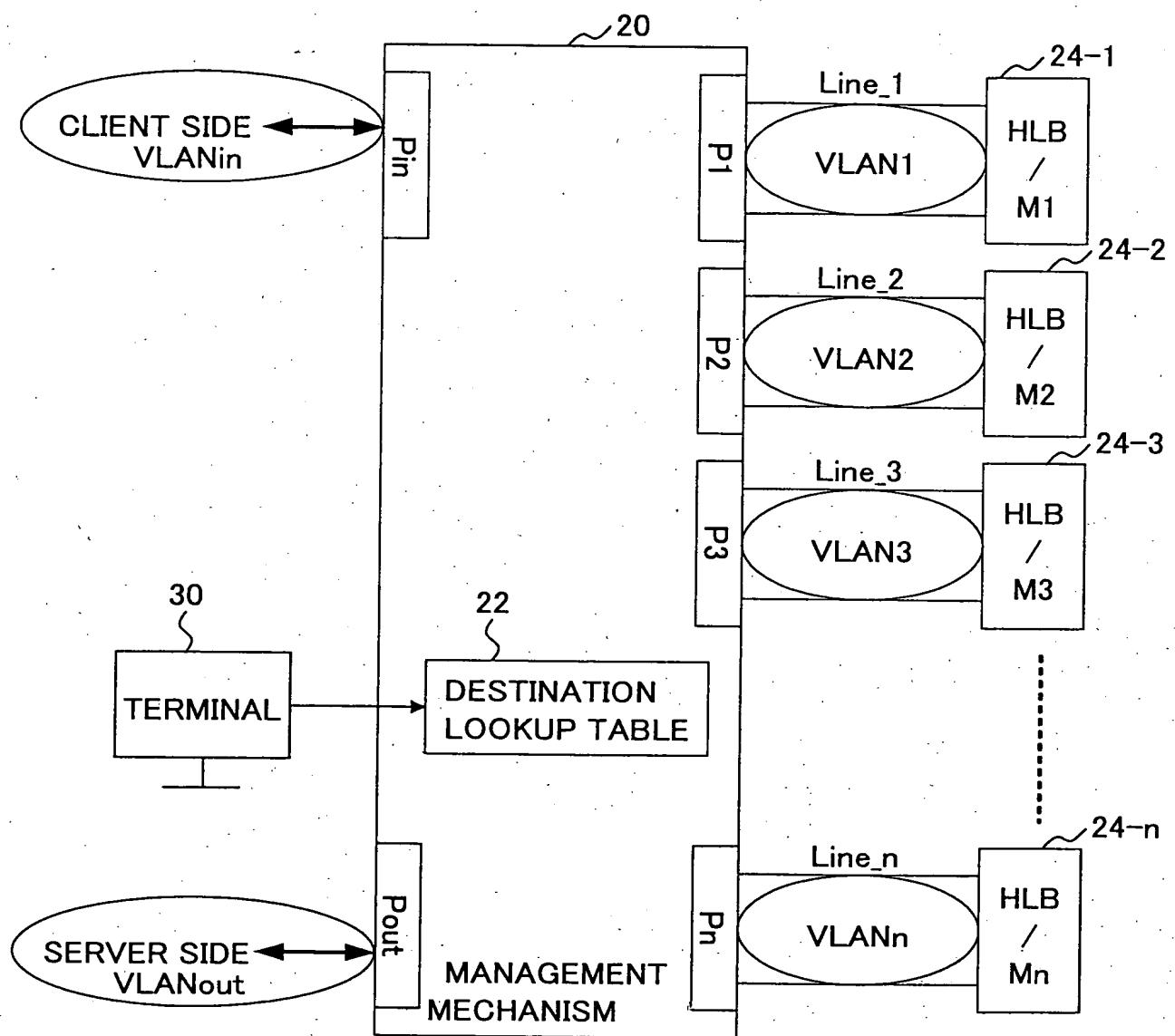


FIG.3

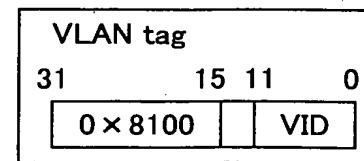


# FIG.4

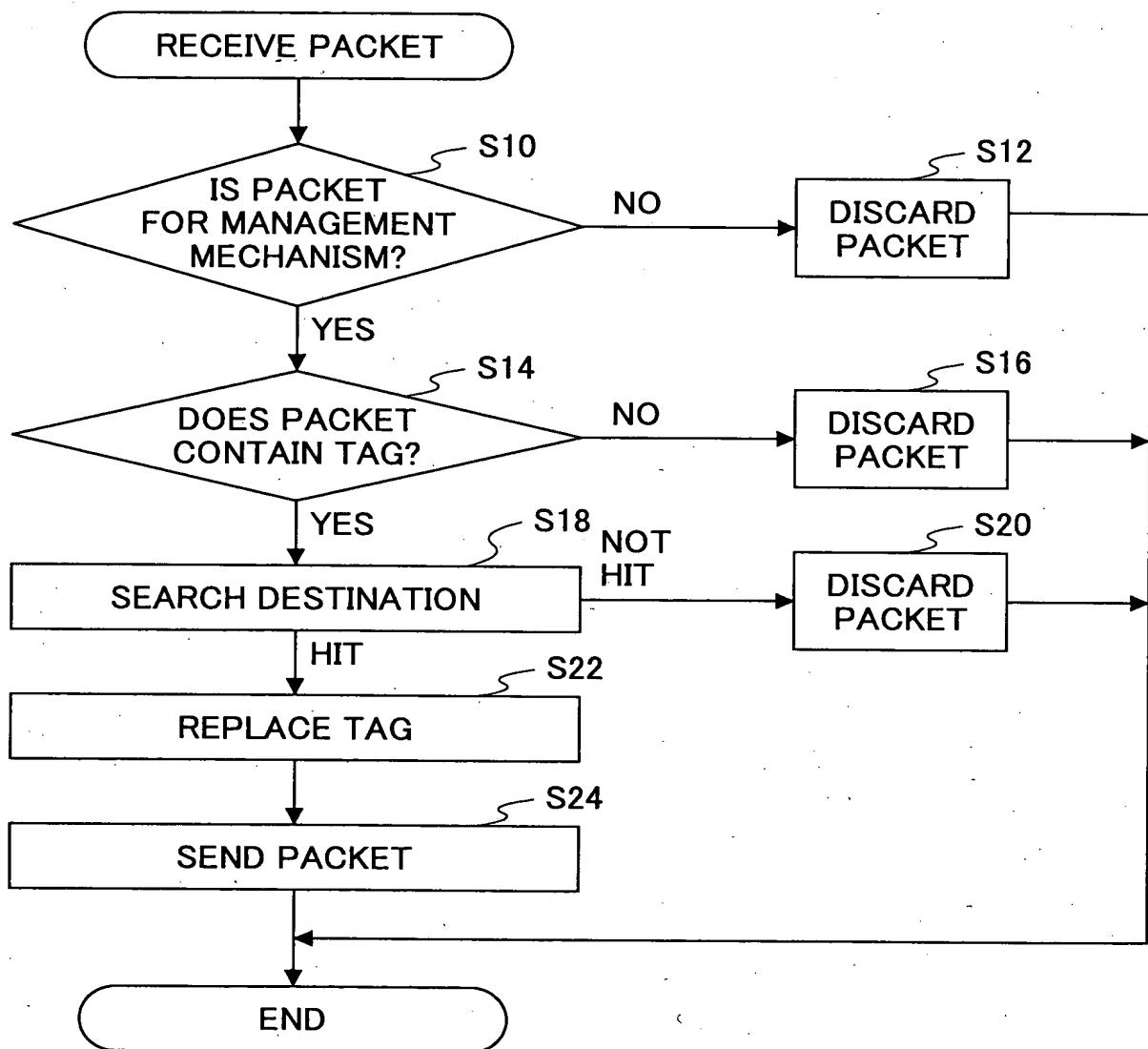
		SEARCH KEY	SEARCH RESULT		
		VLANtag (32bit)	VLANtag (32bit)	MAC ADDRESS (48bit)	PHYSI -CAL PORT
ENTRY OF USER A (VIRTUAL LINK INFOR- MATION)	a1 LINE	VLANin_a	UP VLAN1_a	M1	P1
	a2	UP VLAN1_a	UP VLAN2_a	M2	P2
	a3	UP VLAN2_a	UP VLAN3_a	M3	P3
	a4	...	...	...	...
	a5	UP VLANn_a	VLANout_a	Mout	Pout
	a6	VLANout_a	DOWN VLANn_a	Mn	Pn
	a7	...	...	...	...
	a8	DOWN VLAN1_a	VLANin_a	Min	Pin
ENTRY OF USER B (VIRTUAL LINK INFOR- MATION)	b1	VLANin_b	UP VLAN2_b	M2	P2
	b2	UP VLAN2_b	UP VLAN3_b	M3	P3
	b3	...	...	...	...
	b4	UP VLANn_b	VLANout_b	Mout	Pout
		VLANout_b	DOWN VLANn_b	Mn	Pn
		...	...	...	...
		DOWN VLAN2_b	VLANin_b	Min	Pin
		...	...	...	...
ENTRY OF USER X (VIRTUAL LINK INFOR- MATION)	c1	VLANin_x	UP VLAN2_x	M2	P2
	c2	UP VLAN2_x	UP VLAN3_x	M3	P3
	c3	...	...	...	...
	c4	UP VLANn_x	VLANout_x	Mout	Pout
		VLANout_x	DOWN VLANn_x	Mn	Pn
		...	...	...	...
		DOWN VLAN2_x	VLANin_x	Min	Pin
		...	...	...	...

UP-  
DIRECTIONAL  
ROUTING  
PATH

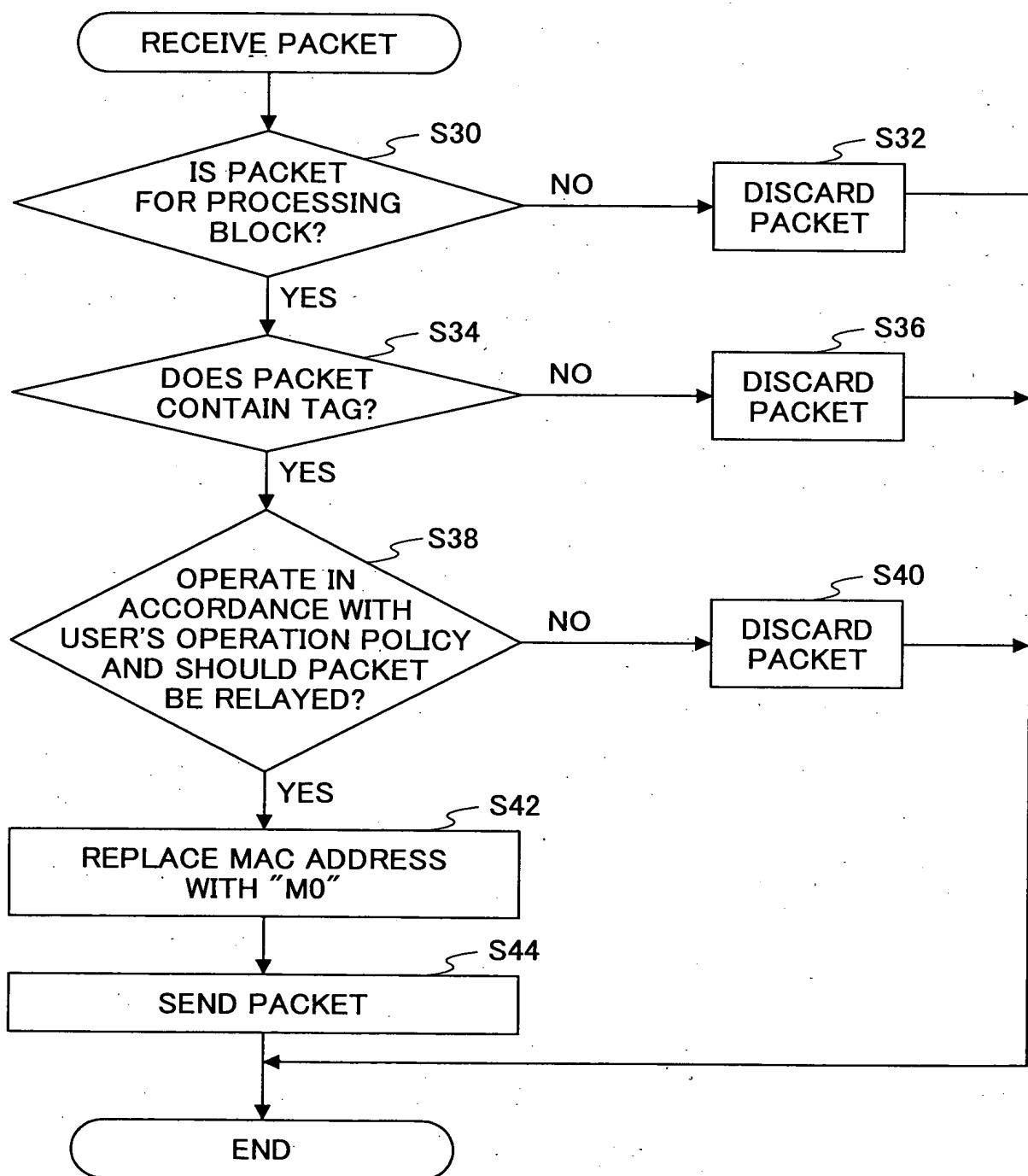
DOWN-  
DIRECTIONAL  
ROUTING  
PATH



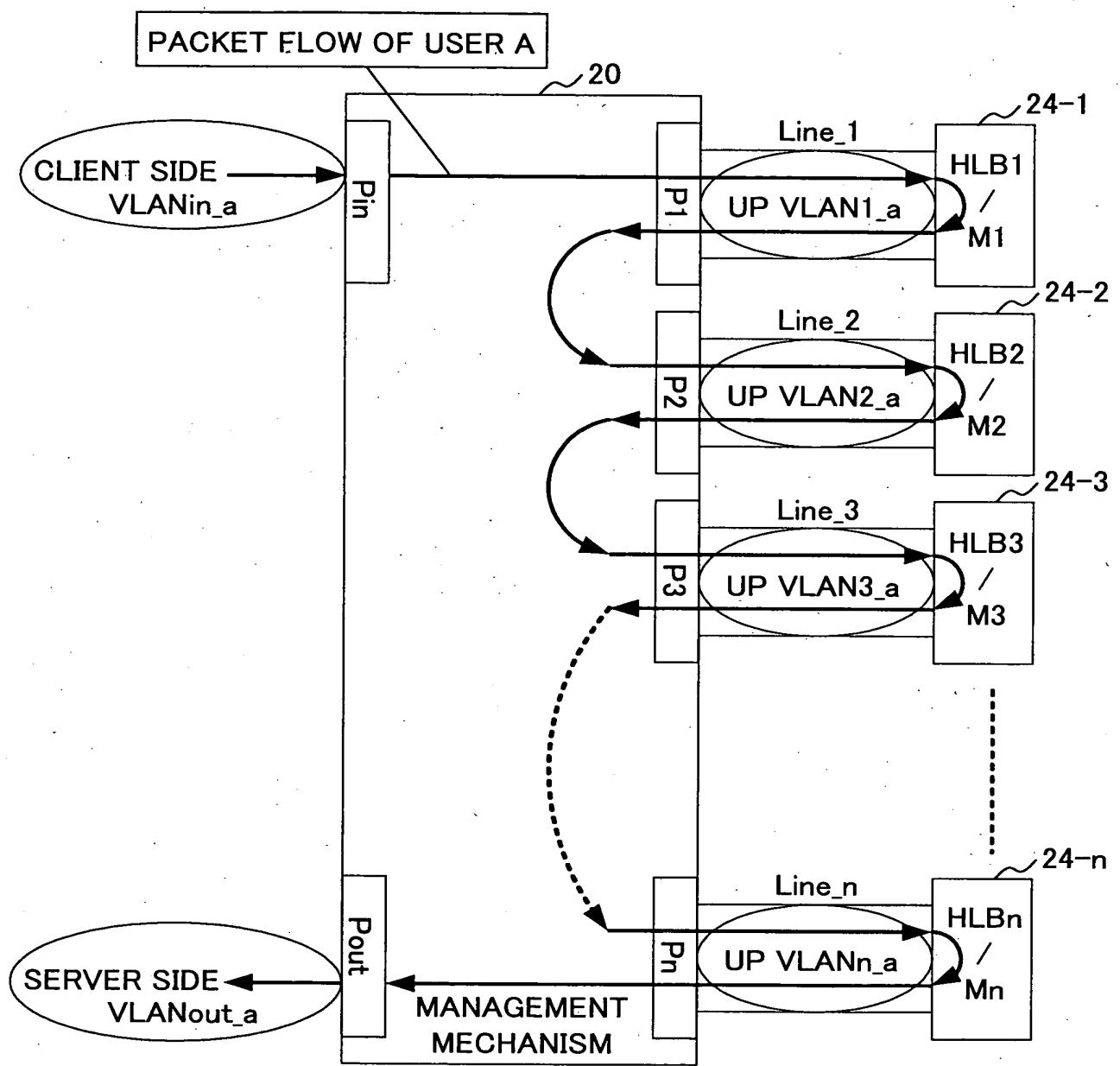
**FIG.5**



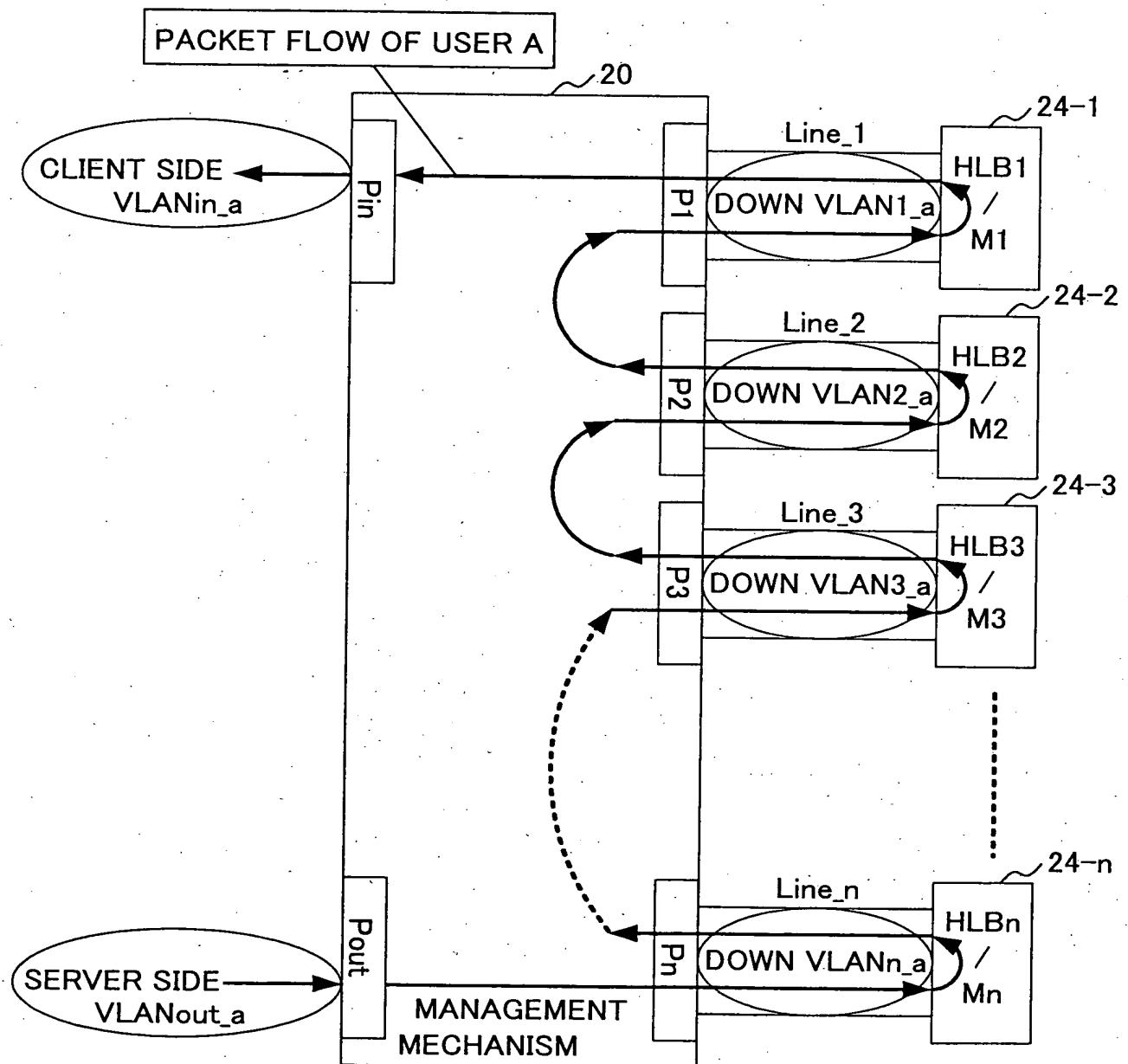
**FIG.6**



**FIG.7**



**FIG.8**



# FIG.9

SEARCH KEY		SEARCH RESULT	
	VLANtag (32bit)	VLANtag (32bit)	MAC ADDRESS (48bit)
	PHYSICAL PORT		
b0 LINE	VLANin_a	UP VLAN1_a	M1 P1
b1	UP VLAN1_a	UP VLAN2_a	M2 P2
b2	UP VLAN2_a	UP VLAN3_a	M3 P3
b3	...	...	...
b4	UP VLANn_a	VLANout_a	Mout Pout
c1	VLANout_a	DOWN VLANn_a	Mn Pn
c2	...	...	...
c3	DOWN VLAN1_a	VLANin_a	Min Pin
b0 LINE	VLANin_b	UP VLAN1_b	M1 P1
b1	UP VLAN1_b	UP VLAN2_b	M2 P2
b2	UP VLAN2_b	UP VLAN3_b	M3 P3
b3	...	...	...
b4	UP VLANn_b	VLANout_b	Mout Pout
c1	VLANout_b	DOWN VLANn_b	Mn Pn
c2	...	...	...
c3	DOWN VLAN2_b	VLANin_b	Min Pin
c4	...	...	...
c5	...	...	...
c6	...	...	...
c7	VLANin_x	UP VLAN3_x	M3 P3
c8	UP VLAN3_x	UP VLAN4_x	M4 P4
c9	...	...	...
c10	UP VLANn_x	VLANout_x	Mout Pout
c11	VLANout_x	DOWN VLANn_x	Mn Pn
c12	...	...	...
c13	DOWN VLAN2_x	VLANin_x	Min Pin